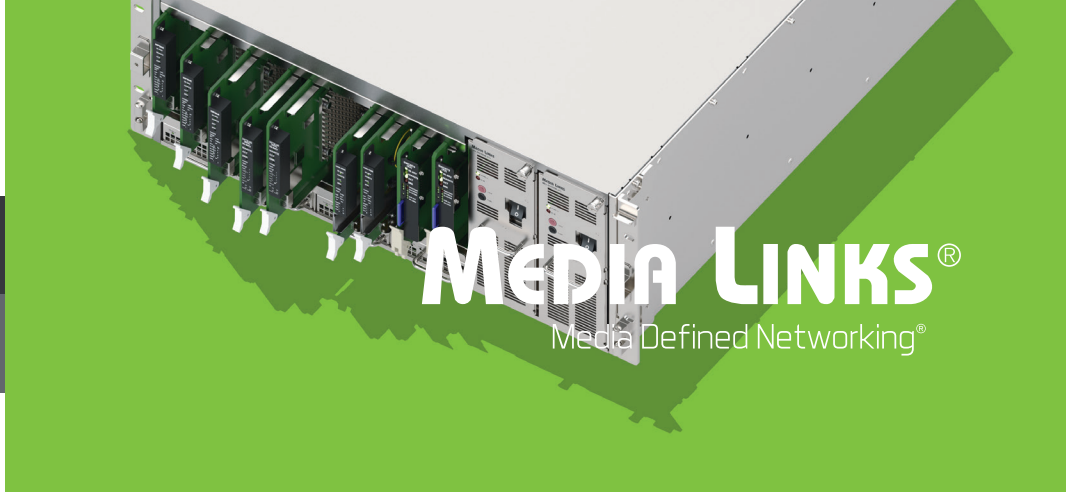
Media Links® inside

Made for the MD8000 Platform™

Core Gateways

MD8000 Line Cards

DATASHEET **Version 3.0**



Description

The 8 x 1GbE module accepts one to eight 10/100/1000 BaseT signals, provides rate policing and VLAN tagging, and transfers them to the MD8000 SW-CNT modules.

A 4 x 1GbE line module (with rear panel SFP cage) is also available that accepts one to four 10/100/1000 Ethernet BaseT signals

Applications

- LAN Extension
- WAN Access Circuit
- Network Management
- Telemetry
- File Transfer

Features & Benefits

- Eight, 1GbE fully independent Ethernet Circuits (Note: a 4 x 1GbE version is also available)
- Automatic Rate Negotiation
- 4 Transport/Operation Modes:
  - Transparent
  - Double Tag
  - Tunneling
  - Tag Exchange (Over Write)
- Input Filtering and Rate Policing to eliminate traffic disruptions

Technical overview

- Made for the MD8000 and MD8000-100G networking platforms
- External interface to user circuits
- Optical (LC) or Electrical (RJ-45) interfaces via Rear Panel SFP Cage
- Auto protection switchover

Compatible with

MD8000SX, MD8000, MD8000 EX and MD8000-100G Platforms

DATASHEET

8 x 1GbE, 8 Port 10/100/1000 BaseT Ethernet Line Module

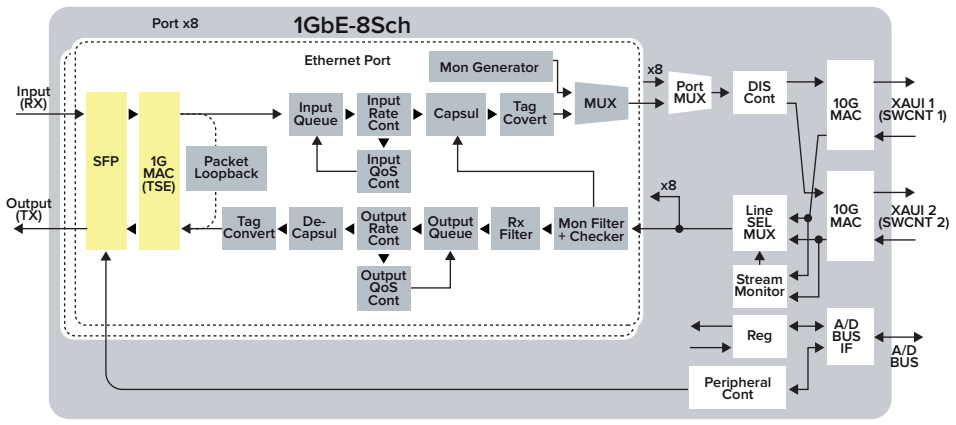
The 8 x 1GbE module accepts one to eight 10/100/1000 BaseT signals, provides rate policing and VLAN tagging and transfers them to the MD8000-SW-CNT modules. In the receive direction, the 8 x 1GbE module accepts Ethernet packets transferred from the SW-CNT and provides one to eight unique 10/100/1000 BaseT output signals.

Eight completely independent bi-directional GbE channels ensure that data on the individual ports is kept separate, permitting operation at full wire speed rates with total isolation. Auto-Negotiation is supported on all 8 ports. In addition, customer loopback and continuity checking functionality is also provided to facilitate circuit setup and operational troubleshooting.

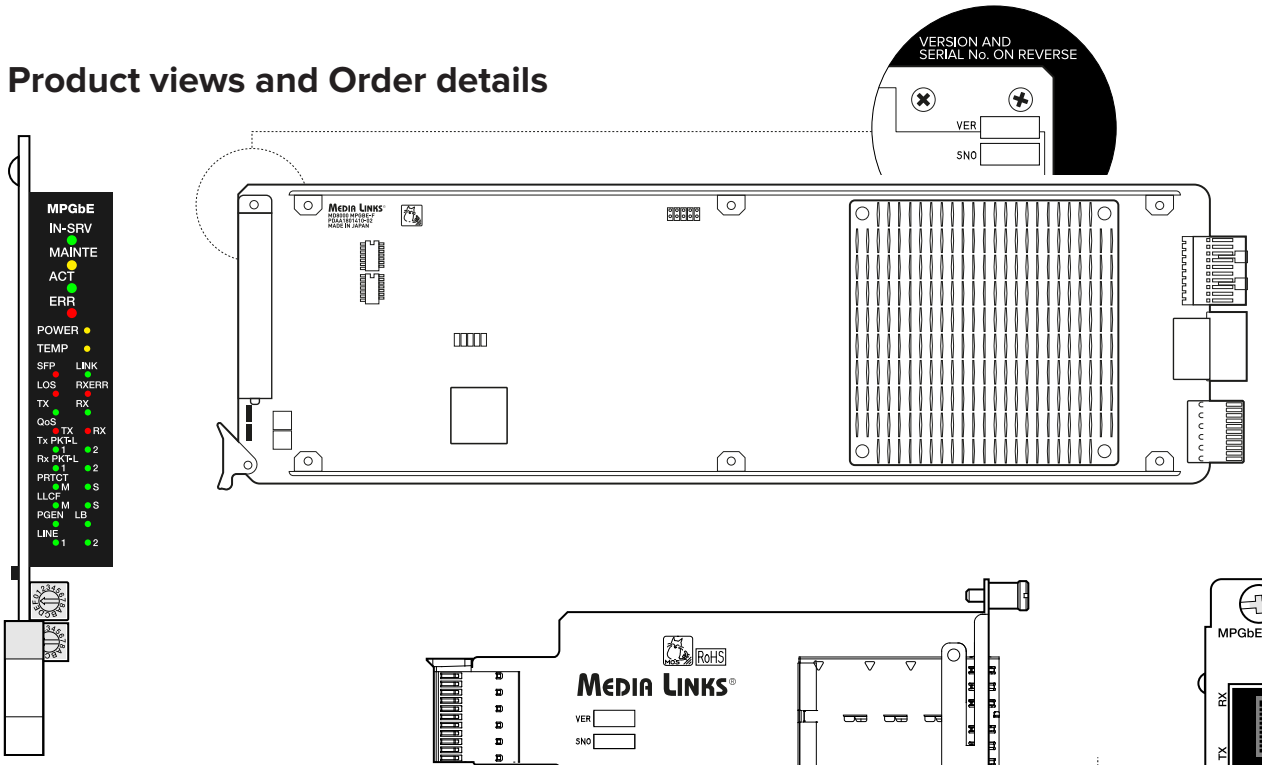
The 8 x 1GbE module has four encapsulation/decapsulation modes of operation: Transparent, Double Tag, Tunneling and Tag Exchange (Over Write). All modes handle packets up to Jumbo Frames (i.e. maximum of 9022 bytes in length including headers and FCS).

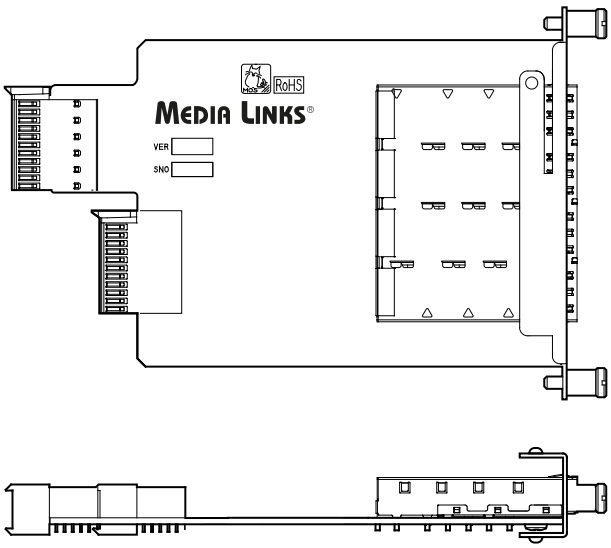
Input filtering and rate policing is provided on each individual Ethernet circuit to guarantee that data bursts cannot disrupt overall traffic flow. Either optical or electrical SFPs can be used on the rear panel.

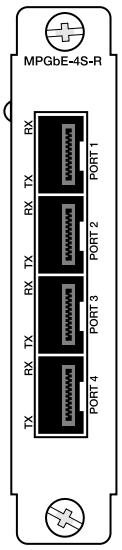
MD8000- 1GbE-8CH Block Diagram

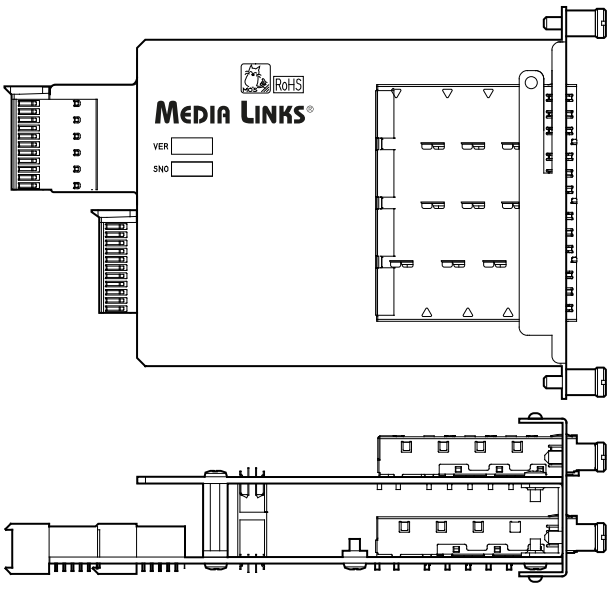


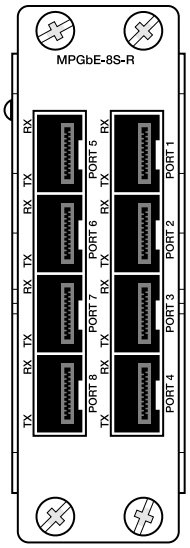
Product views and Order details











ORDER YOUR PRODUCT

4 or 8 x 1GbE, 4 or 8 Port 10/100/1000 BaseT Ethernet Line Module

8 Port 10/100/1000 Front Line Module with 8 Port SFP Cage Rear Panel
Order Code: MD801073-G000 (Front) and MD807041-G000 (Rear)

4 Port 10/100/1000 Front Line Module with 4 Port SFP Cage Rear Panel
Order Code: MD801073-G000 (Front) and MD807040-G000 (Rear)

SFP Cage Rear Panel Plug-ins‡

1Gb SFP Optical Module, 1310nm, 10km, ROHS, Digital Diagnostics
Order Code: SFP-1310-1G10

1Gb SFP Optical Module, 1310nm, 40km, ROHS, Digital Diagnostics
Order Code: SFP-1310-1G40

1Gb SFP Optical Module, 1550nm, 80km, ROHS, Digital Diagnostics
Order Code: SFP-1550-1G80

1Gb SFP Optical Module, 1550nm, 120km, ROHS, Digital Diagnostics
Order Code: SFP-1550-1G120

1Gb SFP RJ45 Electrical Module, ROHS, Digital Diagnostics
Order Code: SFP-RJ45

*Cards shown not to scale.
† Media Links reserves the right to alter specifications without notice.
‡ Note: All SFP modules are compliant to MSA (INF-8074i and SFF-8472) standards.

Service Specifications & Supported Parameters†

8 x 1GbE, 8 Port 10/100/1000 BaseT Ethernet Line Module: Customer Network Interface Specifications

Item	Description	Remarks
Input/output interface	8 X SFP cages for 8 port version, 4 X SFP cages for 4 port version. MSA compliant SFP modules shall be used (SFF-8074i and SFF-8472). (LC connectors for optical SFPs, RJ-45 connectors for electrical SFPs.)	
Supportable interfaces	1000BASE-X (IEEE 802.3z Optical); 1000BASE-T (IEEE 802.3ab Electrical); 100BASE-TX (IEEE 802.3u Electrical); and 10BASE-T (IEEE 802.3i Electrical)	Installed modules shall meet their individual port-parameter settings
Input data rate limitation	Specifiable in 1 Mbps steps	
Output data rate limitation	Specifiable in 1 Mbps steps	
Input priority control	Controllable using VLAN Priority	Strict Priority
Output priority control	Controllable using VLAN Priority	Strict Priority
MTU/MRU	9,022 bytes	
Tagging modes	Transparent, Double Tag, Tunneling, and Tag Exchange (Over Write)	
Transportation support function	Auto Protection and LLCF	
Self-test function	Packet Loopback	
TxRx Filter (VLAN Table)	Up to 32 entries/port (Common to both Tx & Rx)	To be used for Transparent, Double Tag, and Tag Exchange modes
Rx Filter (IP Filter)	2 entries/port (Line-1/Line-2)	To be used for Tunneling mode
Tag Exchange Table	Up to 32 entries/port (Tx/Rx separate)	Usable for Tag Exchange mode

General specifications

External dimensions (Front) 17 mm (W) * 113 mm (H) * 367 mm (D)
Rear board: 41 mm (W) * 96 mm (H) * 126 mm (D) for 8 port version. (For 4 port version, width is 20.5mm (W))

Weight 1 kg or less

Power consumption 33.0 W or less

Board Structure Front and Rear

Operating temperature 0 ~ 40°C (Ambient) (Under the no-condensing humidity condition)

Chassis slots needed Front board occupies a 1-slot width. Rear board occupies either a 1-slot width (SFPx4port) or a 2-slot width (SFPx8port)

Redundancy modes All MD8000 modes of operation are supported (Single/Class B/Class C/Class J)

Compliance CE/CSA, NEBS Level 3

† Media Links reserves the right to to alter specifications without notice.

Media Links (Headquarters)
Kawasaki Tech Center 18F
580-16 Horikawa-cho,
Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0013 Japan
Phone: +81 44-589-3440
query@medialinks.co.jp

Media Links Americas
431-C Hayden Station Road
Windsor, CT 06095
USA
Phone: +1 860-206-9163
Fax: +1 860-206-9165
info@medialinks.com

Media Links EMEA
Suite 18242, PO Box 6945,
London W1A6US
UK
Phone: +44 207 096 9569
emea_info@medialinks.com

Media Links Australia
2-12 Rokeby Street,
Collingwood, VIC 3066,
Australia
Phone: +61 3-9017-0175
Fax: +61 3-8456-6339
info@medialinksaustralia.com.au

www.medialinks.com

MEDIA LINKS®
Media Defined Networking®